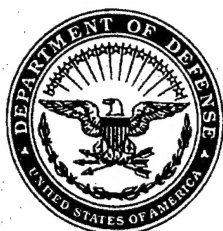




CALS TEST NETWORK

AFCTN Test Report 93-058

AFCTB-ID
92-064



Technical Publication Transfer

Using:



ArborText's Data



MIL-D-28000A (IGES)
MIL-M-28001A (SGML)
MIL-R-28002A (Raster)
MIL-D-28003 (CGM)

Quick Short Test Report

14 October 1992

DISTRIBUTION STATEMENT A

Approved for public release
Distribution Unlimited

Prepared for

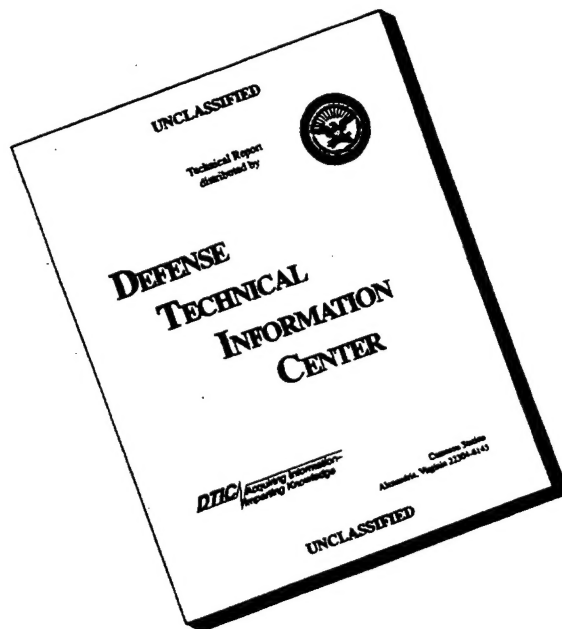
Electronic Systems Center

DTIC QUALITY INSPECTED 3



19960822 132

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

Technical Publication Transfer

Using:

ArborText's Data

MIL-D-28000A (IGES)

MIL-M-28001A (SGML)

MIL-R-28002A (Raster)

MIL-D-28003 (CGM)

Quick Short Test Report

14 October 1992

Prepared By

Air Force CALS Test Bed
Wright-Patterson AFB, OH 45433

AFCTB Contact

Gary Lammers
(513) 427-2295

AFCTN Contact

Mel Lammers
(513) 427-2295

DTIC QUALITY INSPECTED 3

DISCLAIMER

This document was prepared as an account of the work sponsored by the Air Force. Neither the United States Government, the Air Force, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, nor represents that its use would not infringe on privately owned rights. Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the Air Force. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the Air Force, and shall not be used for advertising or product endorsement purposes.

Available to the public from the
National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161

This report and those involved in its preparation do not endorse any product, process, or company stated herein. Use of these means by anyone does not imply certification by the Air Force CALS Test Network (AFCTN).

Contents

1.	Introduction.....	1
1.1.	Background.....	1
1.2.	Purpose.....	2
2.	Test Parameters.....	3
3.	1840A Analysis.....	6
3.1.	External Packaging.....	6
3.2.	Transmission Envelope.....	6
3.2.1.	Tape Formats.....	6
3.2.2.	Declaration and Header Fields.....	6
4.	IGES Analysis.....	7
5.	SGML Analysis.....	9
6.	Raster Analysis.....	9
7.	CGM Analysis.....	10
8.	Conclusions and Recommendations.....	11
9.	Appendix A - Tapetool Report Logs.....	12
9.1.	Tape Catalog.....	12
9.2.	Tape Evaluation Log.....	13
9.3.	Tape File Set Validation Log.....	18
9.4.	Other Tape Reading Logs.....	24
10.	Appendix B - Detailed IGES Analysis.....	25
10.1.	File D001Q007.....	25
10.1.1.	Paser/Verifier Log.....	25

10.1.2. Output iges2ps.....	30
10.1.3. Output Cadkey v4.06.....	31
10.1.4. Output IGESView.....	32
10.1.5. Output IslandDraw.....	33
10.1.6. Preview Error Log.....	34
10.1.7. Preview Output.....	35
10.1.8. Preview Output.....	36
10.2. File D001Q009.....	37
10.2.1. Parser/Verifier Log.....	37
10.2.2. Cadkey v4.06 Error Log.....	43
10.2.3. Cadkey Output.....	45
10.2.4. Output iges2ps.....	46
10.2.5. Output IGESView.....	47
10.2.6. Output IGESWorks.....	48
10.2.7. Output IslandDraw.....	49
10.2.8. Preview Output.....	50
10.2.9. Preview Output.....	53
11. Appendix C - Detailed Raster Analysis.....	54
11.1. File D001R005 - D001R011.....	54
11.1.1. Output IslandPaint.....	54
11.1.2. Output Preview D001R005.....	55
11.1.3. Output Preview D001R011.....	56
11.1.3. Output Ventura Publisher.....	57
12. Appendix D - Detailed CGM Analysis.....	58

12.1. File D001C006.....	58
12.1.1. Parser Log MetaCheck.....	58
12.1.2. validcgm Log.....	59
12.1.3. Output Harvard Graphics.....	61
12.1.4. Output IslandDraw.....	62
12.2. File D001C010.....	63
12.2.1. Parser Log MetaCheck.....	63
12.2.2. validcgm Log.....	64
12.2.3. Output Harvard Graphics.....	66
12.2.4. Output IslandDraw.....	67
12.3. Output Ventura Publisher - D001C006-D001C010...	68

1. Introduction

1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-Cycle Support (CALS) Test Network (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving and evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

1.2 Purpose

The purpose of the informal test, reported in this QSTR, was to analyze ArborText's interpretation and use of the CALS standards in transferring technical publication data. ArborText used its CALS Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the AFCTN technical staff on a 9-track magnetic tape.

2. Test Parameters

Test Plan: AFCTB 92-064

Date of Evaluation: 14 October 1992

Evaluators: George Elwood
Air Force CALS Test Bed
DET 2 HQ ESC/ENCP
Suite 300
4027 Colonel Glenn Hwy
Dayton OH 45431-1672

Data Originator: Betty Lim
ArborText, Inc.
1000 Victors Way
Suite 400
Ann Arbor MI 48108

Data Description: Technical Manual Test
1 Document Declaration file
3 Document Type Definitions (DTD)
5 Initial Graphics Exchange Specification (IGES) files
1 Text file
2 Raster files
2 Computer Graphics Metafile (CGM) files

Data Source System: IGES

HARDWARE Unknown

SOFTWARE ArborText Adept draw2iges

Text/Standard Generalized Markup Language (SGML)

HARDWARE

Unknown

SOFTWARE

ArborText Adept

Raster

HARDWARE

Unknown

SOFTWARE

ArborText Adept tiff2g4

CGM

HARDWARE

Unknown

SOFTWARE

ArborText Adept draw2cgm

Evaluation Tools Used:

MIL-STD-1840A (TAPE)

SUN 3/280

AFCTN Tapetool v1.2.8 UNIX

XSoft CAPS/CALS v40.4

MIL-D-28000 (IGES)

Sun SparcStation 2

XSoft CAPS iges2ps

ArborText iges2draw

IGES Data Analysis (IDA) Parser/Verifier

IDA IGESView v3.0

International TechneGroup Incorporated

(ITI) IGES/Works v1.0

Rosetta Technologies Preview v3.2

Cheetah Gold 486

Cadkey Cadkey v4.06

MIL-M-28001 (SGML)

Cheetah Gold 486

Exoterica XGMLNormalizer v1.2e3.2

MIL-R-28002 (Raster)

SUN SparcStation 2

ArborText g42tiff

AFCTN validg4

AFCTN calstb.475

Island Graphics IslandPaint v3.0

Rosetta Technologies Prepare/Preview

Cheetah

Inset Systems HiJaak v2.02

Software Publishing Corporation

(SPC) Harvard Graphics v3.0

Corel Ventura Publisher

MIL-D-28003 (CGM)

SUN SparcStation 2

XSoft CAPS cgm2ps v6.0x

ArborText cgm2draw

Island Graphics IslandDraw v3.0

Sun 3/60

Advanced Technology Center

(ATC) CGM-View R2.0

Cheetah Gold 486

ATC MetaView R1.12

ATC MetaCheck R2.05

SPC Harvard Graphics v3.0

Corel Ventura Publisher

Standards

Tested:

MIL-STD-1840A

MIL-D-28000A

MIL-M-28001A

MIL-R-28002A

MIL-D-28003

3. 1840A Analysis

3.1 External Packaging

The tape arrived at the Air Force CALS Test Bed (AFCTB) enclosed in a box in accordance with ASTM D 3951. The exterior of the box was marked with the magnetic tape warning label, as required by MIL-STD1840A, para. 5.3.1.3.

The tape was enclosed in a barrier bag material as required by MIL-STD-1840A, para. 5.3.1.2. Inspection of the tape reel showed the required label indicating the recording density as required by MIL-STD-1840A, para. 5.3.1. Enclosed in the box was a packing list showing all files recorded on the tape.

3.2 Transmission Envelope

The 9-track tape received by the AFCTB contained MIL-STD-1840A files. The files were named per the standard conventions.

3.2.1 Tape Formats

The tape was run through the AFCTN *Tapetool* v1.2.8 utility. No errors were encountered while evaluating the contents of the tape labels.

The tape was also read using XSoft *CAPS read1840A* without a reported problem.

3.2.2 Declaration and Header Fields

No errors were found in the Document Declaration file header or data file headers.

4. IGES Analysis

This tape contained six IGES files. All files were evaluated using IDA's *Parser/Verifier* set to check for the CALS Class I standards. No specific AFCTN errors were reported. Files D001Q007 and D001Q009 reported basic IGES errors. None of the files contained the required CALS statement defined in MIL-D-28000A, para. 3.2.1.3.1.

File D001Q007 was reported with multiple polynomial faults.

*** Entity type: 112

WARNING 2238: Polynomial segment (0) at D 23 is degenerate.

File D001Q009 was reported with a severe error with entity type 102.

*** Entity type: 102

SEVERE 2116: Invalid entity type (D 21) for composite curve at D 27.

102	35	0	1	0	0	0	000010101D	27	
102	1	0	1	0			0D	28	
102,2,21,25,0,1,23;								27P	35

The IGES files were imported into various software utilities available within the AFCTB. The two files discussed above were selected for the additional procedure. File D001Q007 was a drawing of a helicopter. The translation into Cadkey's *Cadkey* was made without a reported error. When the files were displayed and printed, the circles showing the station location were noted to have double lines.

The files were converted using ArborText's *iges2draw* utility without a reported error. When the resulting files were imported into Island Graphics' *IslandDraw*, the circles were noted as being filled.

The files were imported into IDA's *IGESView* without a reported errors. When the images were displayed and printed the circles were noted as being filled with a crosshatch.

The files were converted using Rosetta Technologies' *Prepare* and displayed using *Preview*. Errors were generated during the translation procedure, with some being unsupported entities. The resulting image displayed random line across the page and double circles were also noted.

The files were converted using XSoft's *CAPS iges2ps* utility. No errors were reported during the process. The resulting files displayed the double circles which were filled with a crosshatch.

The files were imported into ITI's *IGESWorks*. Errors were reported during this process relating to precession and entity conflicts. The files displayed with the double circles noted. These circles were noted as being a different color and therefore an added entity.

File D001Q009 was also run through these same software packages. Cadkey's *Cadkey* translated the file with reported errors. The resulting image appeared to be correct. ArborText's *iges2draw* utility reported no errors and the displayed and printed image appeared to be correct.

IDA's *IGESView* filled the area with a solid and made the image unusable.

Rosetta Technologies' *Prepare* reported errors, with most being unsupported entities and other major IGES problems during the conversion, and displayed the background as a crosshatch.

The file was converted using XSoft's *CAPS iges2ps* utility. No errors were reported but the conversion took several minutes. The resulting files appear correct except that the crosshatching makes the text hard to read. The word "WORKS" also fell outside the defined boundary.

The file was imported into ITI's *IGESWorks* with reported errors. When the file was displayed parts of the image did not display or print.

The selected IGES files had problems in the other utilities available in the AFCTB. No CALS errors were reported from

the parser but the lack of the required CALS statement prevents these files from meeting the CALS MIL-D-28000A specification.

5. SGML Analysis

The Text file from this document was tested using Exoterica's *XGMLNormalizer* parser. This tape is a demonstration of the capability of ArborText's system. As part of the capability they broke the DTD up into sections, with each section containing added tags. The DTD parsed and the document also parsed without error. The DTD and Text files meet the CALS MIL-M-28001A specification.

6. Raster Analysis

This tape contained two Raster files. Both files were reported as being valid CALS Raster files by the AFCTN *validg4* utility.

The files were imported into the AFCTN *calstb.475* utility. No problems were noted. The images were straight and no orphan pixels were noted.

Both files were converted to an IMG format using Inset Systems' *HiJaak* and then imported into Corel's *Ventura Publisher*. No problems were reported during this procedure.

The files were converted using Rosetta Technologies' *Prepare* and viewed and printed using *Preview*. No problems were noted.

The files were converted using ArborText's *g42tiff* utility and imported into Island Graphics' *IslandPaint*. No problems were noted.

The Raster files meet the CALS MIL-R-28002A specification.

7. CGM Analysis

The tape contained two CGM files. Both files were evaluated using ATC's *MetaCheck* with CALS options. This software reported that both files were valid files. File D001C010 was reported with some basic CGM errors.

The files were checked using the AFCTN *validcgm* utility. This utility reported that both files had errors. The errors were in both the basic CGM and CALS requirements.

Both files were imported into SPC's *Harvard Graphics* v3.0 without a reported problem. The images displayed and printed without problem.

Both files were imported into Corel's *Ventura Publisher* without a problem. The output is included in the Appendix to this report.

When the files were read into ATC's *CGMView*, nothing displayed on the screen. Several options were tried without luck. No error message was generated during this process.

The files were read into ATC's *MetaView* without reported problems. Both files were displayed.

The CGM files, based on the ATC *MetaCheck* report, meet the CALS MIL-D-28003 specification. The AFCTN *validcgm* is known to have a bug as a result errors have been listed.

8. Conclusions and Recommendations

In summary, the tape from ArborText, Inc. was correct. IT could be read properly using the AFCTN Tapetool and XSoft read1840A without a reported error.

The IGES files, because of a lack of the MIL-D-28000A statement in the Start section, do not meet the CALS specification. The files were translated and printed using various IGES tools available with varying degrees of success.

The SGML's DTD and Text files were successfully parsed. The example provided by ArborText was complex, showing the ability of their software. The nature of the DTD required additional work during the parsing operation. The SGML files meet the CALS MIL-M-28001A specification.

The Raster files meet the CALS MIL-R-28002A specification. No problems were encountered while working with the files.

The CGM files meet the CALS MIL-D-28003 specification, using ATC's *MetaCheck* with CALS options. The files were successfully imported into various software applications without a problem.

The tape from ArborText meets the CALS MIL-STD-1840A requirements, with the exception of the IGES files.

9. Appendix A - Tapetool Report Logs

9.1 Tape Catalog

Air Force CALS Test Network Catalog Evaluation - Version 1.2; Release Number 8

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

MIL-R-28003 (1988) - Digital Representation For Communication Of
Illustration Data; CGM Application Profile

ANSI X3.27 (1987) - File Structure and Labeling of Magnetic Tapes
for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Wed Oct 14 11:27:34 1992

MIL-STD-1840A File Catalog

File Set Directory: /cals/tapetool8/Set100

Page: 1

File Name	File Type	Record Format/ Length	Block Length/Total	Selected/ Extracted
D001	Document Declaration	D/00260	02048/000001	Extracted
D001C006	CGM	F/00080	00800/000026	Extracted
D001C010	CGM	F/00080	00800/000034	Extracted
D001G002	DTD	D/00260	02048/000002	Extracted
D001G014	DTD	D/00260	02048/000024	Extracted
D001G015	DTD	D/00260	02048/000002	Extracted
D001G016	DTD	D/00260	02048/000003	Extracted
D001H003	Output Specification	D/00260	02048/000044	Extracted
D001P017	PDL	D/00260	02048/000575	Extracted
D001Q004	IGES	F/00080	02000/000452	Extracted
D001Q007	IGES	F/00080	02000/000151	Extracted
D001Q008	IGES	F/00080	02000/000002	Extracted
D001Q009	IGES	F/00080	02000/000018	Extracted
D001Q012	IGES	F/00080	02000/000002	Extracted
D001Q013	IGES	F/00080	02000/000005	Extracted
D001R005	Raster	F/00128	02048/000005	Extracted
D001R011	Raster	F/00128	02048/000006	Extracted
D001T001	Text	D/00260	02048/000017	Extracted

Catalog Process terminated normally.

9.2 Tape Evaluation Log

Air Force CALS Test Network Tape Evaluation - Version 1.2; Release Number 8
Standards referenced:

- ANSI X3.27 (1987) - File Structure and Labeling of Magnetic Tapes
for Information Interchange
- ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Wed Oct 14 11:25:57 1992

ANSI Tape Import Log

Allocating tape drive /dev/rmt0...

/dev/rmt0 allocated.

VOL1CALS01

nan

4

Label Identifier: VOL1
Volume Identifier: CALS01
Volume Accessibility:
Owner Identifier: nan
Label Standard Version: 4

HDR1D001

00010001000100 92286 99364 000000Unix4.2-mimos

Label Identifier: HDR1
File Identifier: D001
File Set Identifier:
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000000
Implementation Identifier: Unix4.2-mimos

HDR2D0204800260

00

Label Identifier: HDR2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

***** Tape Mark *****

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 1.

***** Tape Mark *****

EOF1D001 00010001000100 92286 99364 000001Unix4.2-mimos

Label Identifier: EOF1
File Identifier: D001
File Set Identifier:
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000001
Implementation Identifier: Unix4.2-mimos

EOF2D0204800260 00

Label Identifier: EOF2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

***** Tape Mark *****

HDR1D001C006 00010002000100 92286 99364 000000Unix4.2-mimos

Label Identifier: HDR1
File Identifier: D001C006
File Set Identifier:
File Section Number: 0001
File Sequence Number: 0002
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000000

Implementation Identifier: Unix4.2-mimos

HDR2F0080000080

00

Label Identifier: HDR2
Recording Format: F
Block Length: 00800
Record Length: 00080
Offset Length: 00

***** Tape Mark *****

Actual Block Size Found = 800 Bytes.

Number of data blocks read = 26.

***** Tape Mark *****

EOF1D001C006

00010002000100 92286 99364 000026Unix4.2-mimos

Label Identifier: EOF1
File Identifier: D001C006
File Set Identifier:
File Section Number: 0001
File Sequence Number: 0002
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000026
Implementation Identifier: Unix4.2-mimos

EOF2F0080000080

00

Label Identifier: EOF2
Recording Format: F
Block Length: 00800
Record Length: 00080
Offset Length: 00

***** Tape Mark *****

<<<< PART OF LOG REMOVED HERE >>>>

***** Tape Mark *****

HDR1D001T001 00010018000100 92286 99364 000000Unix4.2-mimos

Label Identifier: HDR1
File Identifier: D001T001
File Set Identifier:
File Section Number: 0001
File Sequence Number: 0018
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000000
Implementation Identifier: Unix4.2-mimos

HDR2D0204800260 00

Label Identifier: HDR2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

***** Tape Mark *****

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 17.

***** Tape Mark *****

EOF1D001T001 00010018000100 92286 99364 000017Unix4.2-mimos

Label Identifier: EOF1
File Identifier: D001T001
File Set Identifier:
File Section Number: 0001
File Sequence Number: 0018
Generation Number: 0001
Generation Version Number: 00
Creation Date: 92286
Expiration Date: 99364
File Accessibility:
Block Count: 000017
Implementation Identifier: Unix4.2-mimos

EOF2D0204800260 00

Label Identifier: EOF2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

***** Tape Mark *****

***** Tape Mark *****

End of Volume CALS01

End Of Tape File Set

Deallocating /dev/rmt0...

Tape Import Process terminated normally.

9.3 Tape File Set Validation Log

Air Force CALS Test Network File Set Evaluation - Version 1.2; Release Number 8

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

MIL-R-28002 (1989) - Raster Graphics Representation In Binary
Format, Requirements For

Wed Oct 14 11:27:34 1992

MIL-STD-1840A File Set Evaluation Log

File Set: Set100

Found file: D001

Extracting Document Declaration Header Records...

Evaluating Document Declaration Header Records...

srcsys: ArborText

srcdocid: ati_1840_demo

srcrelid: NONE

chglvl: ORIGINAL

dteis: 19920924

dstsys: NONE

dstdocid: ati_1840_demo

dstrelid: NONE

dtetrm: 19920924

dlvacc: NONE

filcnt: T1,G4,H1,Q6,R2,C2,P1

ttlcls: UNCLASSIFIED

doccls: UNCLASSIFIED

doctyp: Technical Order

docttl: NONE

Found file: D001C006

Extracting CGM Header Records...

Evaluating CGM Header Records...

srcdocid: ati_1840_demo

dstdocid: ati_1840_demo

txtfilid: W

figid: NONE

srcgph: test1cgm

doccls: UNCLASSIFIED

notes: NONE

Saving CGM Header File: D001C006_HDR
Saving CGM Data File: D001C006_CGM

Found file: D001C010
Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE
srcgph: test2cgm
doccls: UNCLASSIFIED
notes: NONE

Saving CGM Header File: D001C010_HDR
Saving CGM Data File: D001C010_CGM

Found file: D001G002
Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
notes: DTD

Saving DTD Header File: D001G002_HDR
Saving DTD Data File: D001G002_DTD

Found file: D001G014
Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
notes: DTD. MIL-M-28001B Draft Template DTD. Referenced in the main DTD.

Saving DTD Header File: D001G014_HDR
Saving DTD Data File: D001G014_DTD

Found file: D001G015
Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
notes: Electronic Review DTD subset, defined in MIL-M-28001B, Appendix C

Saving DTD Header File: D001G015_HDR
Saving DTD Data File: D001G015_DTD

Found file: D001G016
Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
notes: ArborText Math Pack DTD subset.

Saving DTD Header File: D001G016_HDR
Saving DTD Data File: D001G016_DTD

Found file: D001H003
Extracting Output Specification Header Records...
Evaluating Output Specification Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
notes: FOSI

Saving Output Specification Header File: D001H003_HDR
Saving Output Specification Data File: D001H003_OS

Found file: D001P017
Extracting PDL Header Records...
Evaluating PDL Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
doccls: UNCLASSIFIED
notes: PostScript version of this document.

Saving PDL Header File: D001P017_HDR
Saving PDL Data File: D001P017_PDL

Found file: D001Q004
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE

srcgph: testliges
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q004_HDR
Saving IGES Data File: D001Q004_IGS

Found file: D001Q007
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE
srcgph: test2iges
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q007_HDR
Saving IGES Data File: D001Q007_IGS

Found file: D001Q008
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE
srcgph: warningicon
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q008_HDR
Saving IGES Data File: D001Q008_IGS

Found file: D001Q009
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE
srcgph: seal
doccls: UNCLASSIFIED

notes: NONE

Saving IGES Header File: D001Q009_HDR
Saving IGES Data File: D001Q009_IGS

Found file: D001Q012
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE
srcgph: cautionicon
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q012_HDR
Saving IGES Data File: D001Q012_IGS

Found file: D001Q013
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE
srcgph: firehazard
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q013_HDR
Saving IGES Data File: D001Q013_IGS

Found file: D001R005
Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE
srcgph: test2g4
doccls: UNCLASSIFIED
rtype: 1
rorient: 000,270

xpelcnt: 002096,001500
rdensty: 0300
notes: NONE

Saving Raster Header File: D001R005_HDR
Saving Raster Data File: D001R005_GR4

Found file: D001R011
Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
figid: NONE
srcgph: testlg4
doccls: UNCLASSIFIED
rtype: 1
rorient: 000,270
rpelcnt: 000720,000713
rdensty: 0300
notes: NONE

Saving Raster Header File: D001R011_HDR
Saving Raster Data File: D001R011_GR4

Found file: D001T001
Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: ati_1840_demo
dstdocid: ati_1840_demo
txtfilid: W
doccls: UNCLASSIFIED
notes: SGML

Saving Text Header File: D001T001_HDR
Saving Text Data File: D001T001_TXT

Evaluating numbering scheme...
No errors were encountered during numbering scheme evaluation.
Numbering scheme evaluation complete.

Checking file count...
No errors were encountered during file count verification.
File Count verification complete.

No errors were encountered in Document D001.

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

9.4 Other Tape Reading Logs

Include other log here if errors were reported.

10. Appendix B - Detailed IGES Analysis

10.1 File D001Q007

10.1.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
***      MARCH 1992      ***
***   IGES Data Analysis   ***
***   (708) 449-3430      ***
```

Input file is D001Q007_IGS

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is October 14, 1992 2:05 PM

*** File and Product Name Information ***

```
File name from sender   = './C1840_TAPE_IMAGE/d001q007.data'
File creation Date.Time = '920924.182541'
Model change Date.Time  = ''
Author                  = ''
Department              = ''
Product name from sender = 'ati_1840_demo/test2iges'
Destination product name = ''
```

*** Parameter Delimiters ***

```
Delimiter = ','
Terminator = ';'

```

*** Originating System Data ***

```
System ID           = 'ArborText Inc. - IslandDraw'
Preprocessor version = 'draw2iges Version 3.0'
Specification version = 6 (IGES 4.0)
```

*** Precision levels ***

```
Integer bits = 16
Floating point - Exponent = 308 Mantissa = 15
Double precision - Exponent = 308 Mantissa = 15
```

*** Global Model Data ***

Model scale = 1.0000E+00
Unit flag = 2
Units = 'MM'
Line weights = 1000
Maximum line thickness = 1.000000E+01
Minimum line thickness = 1.000000E-02
Granularity = 1.000000E-02
Maximum coordinate = 1.829040E+02

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	573
	Blanked	14
Independence:	Independent	567
	Physically Subordinate	14
	Logically Subordinate	6
	Totally Subordinate	0
Entity use:	Geometry	0
	Annotation	587
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	587
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	0	11	Circular arc
112	0	0	518	Parametric spline curve
212	0	0	37	General note
230	0	0	14	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size

	406	8301	0	1	IDA Property - Text style
+	406	8305	0	3	Implementor entity instance
	410	0	0	1	View - Orthographic parallel

+ Indicates use of a Implementor defined form or entity.

*** Entity Count by Level ***

Level	Count
0	587

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 587

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
11	-	-	-	-	-	518	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
116	118	120	122	124	125	126	128	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line

- - - - - Dotted
- - - - - User defined

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	48	(0.0100)
1	21	(0.0100)
11	481	(0.1100)
7	6	(0.0700)
17	13	(0.1700)
10	14	(0.1000)
12	4	(0.1200)

*** Colors Used in Data ***

Defaulted	21
Black	544
White	22

***** ENTITY ANALYSIS *****

*** Entity type: 100

*** Entity type: 112

WARNING 2238: Polynomial segment (0) at D 23 is degenerate.
WARNING 2238: Polynomial segment (1) at D 23 is degenerate.
WARNING 2238: Polynomial segment (2) at D 23 is degenerate.
WARNING 2238: Polynomial segment (3) at D 23 is degenerate.
WARNING 2238: Polynomial segment (4) at D 23 is degenerate.
WARNING 2238: Polynomial segment (5) at D 23 is degenerate.
WARNING 2238: Polynomial segment (7) at D 23 is degenerate.
WARNING 2238: Polynomial segment (8) at D 23 is degenerate.
WARNING 2238: Polynomial segment (9) at D 23 is degenerate.
WARNING 2238: Polynomial segment (10) at D 23 is degenerate.
WARNING 2238: Messages regarding degenerate polynomial segment suppressed.

*** Entity type: 212

37 text strings in data file.

Average text aspect ratio in file is 0.8335565.
Minimum text aspect ratio in file is 0.6864177.
Maximum text aspect ratio in file is 1.0288039.

FONTS USED IN FILE

FONT	COUNT	NAME
1	37	Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D 5 contains 1 views.
Drawing at D 5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
XMIN = Not Set XMAX = Not Set
YMIN = Not Set YMAX = Not Set
ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

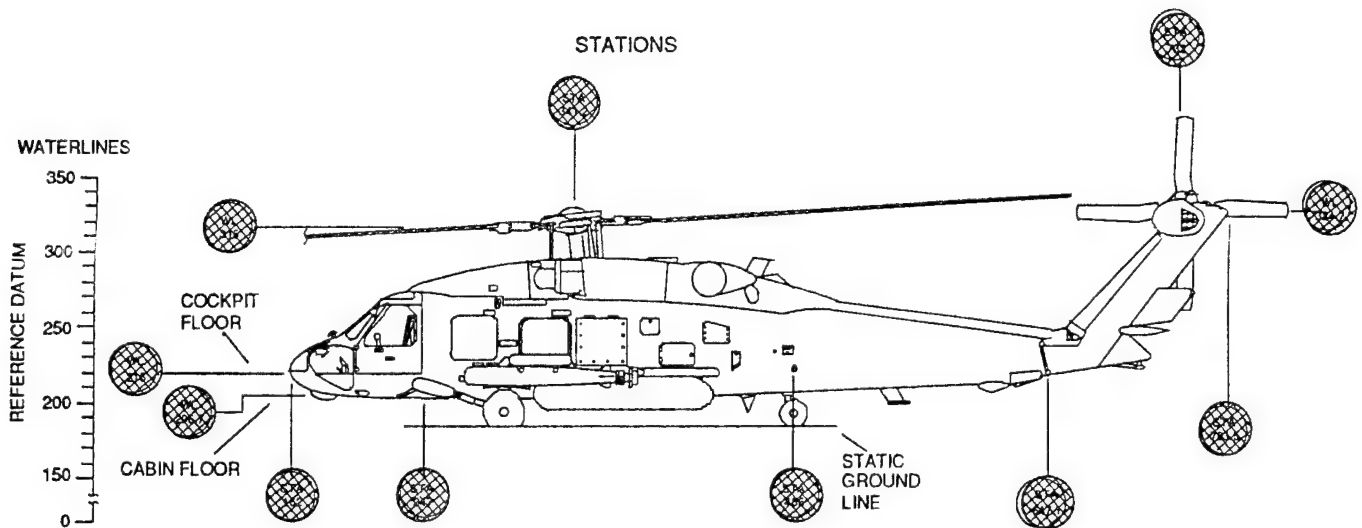
2015: 626 Mathematically incorrect definitions.

*** Error Summary ***

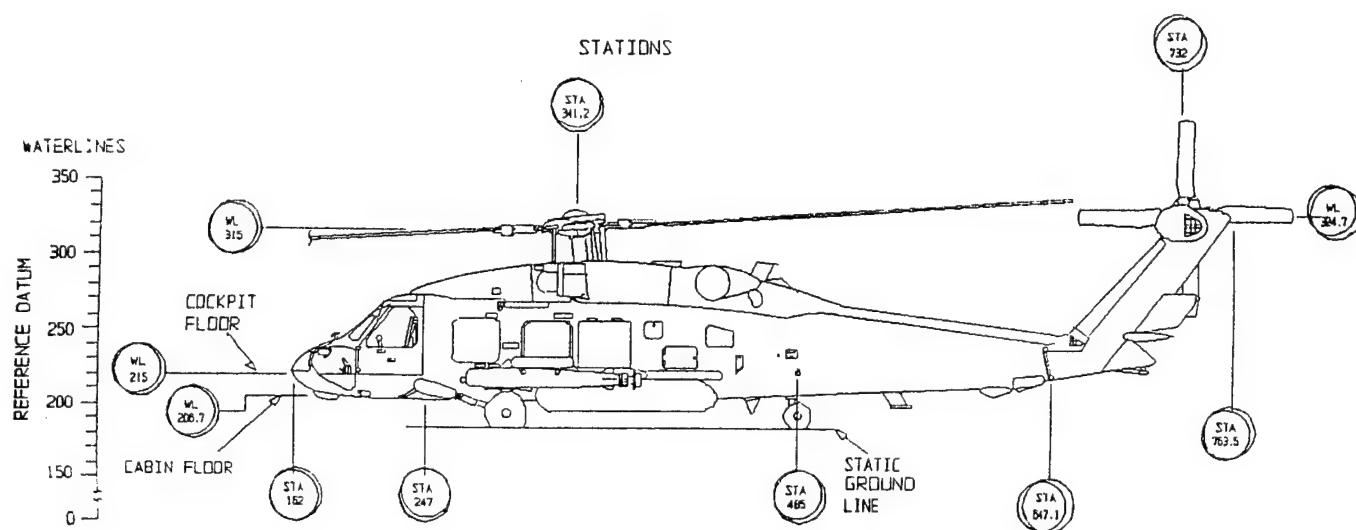
0 fatal errors
0 severe errors
0 errors
626 warnings
0 cautions
0 nitpicks
0 notes

*** End of Analysis of D001Q007_IGS ***

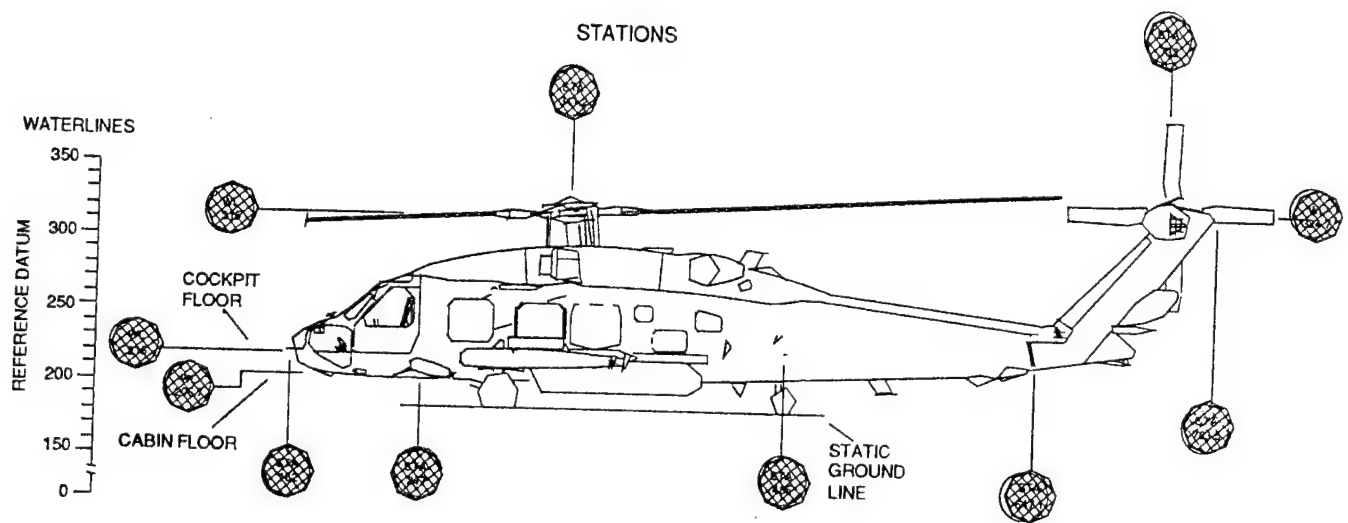
10.1.2 Output iges2ps



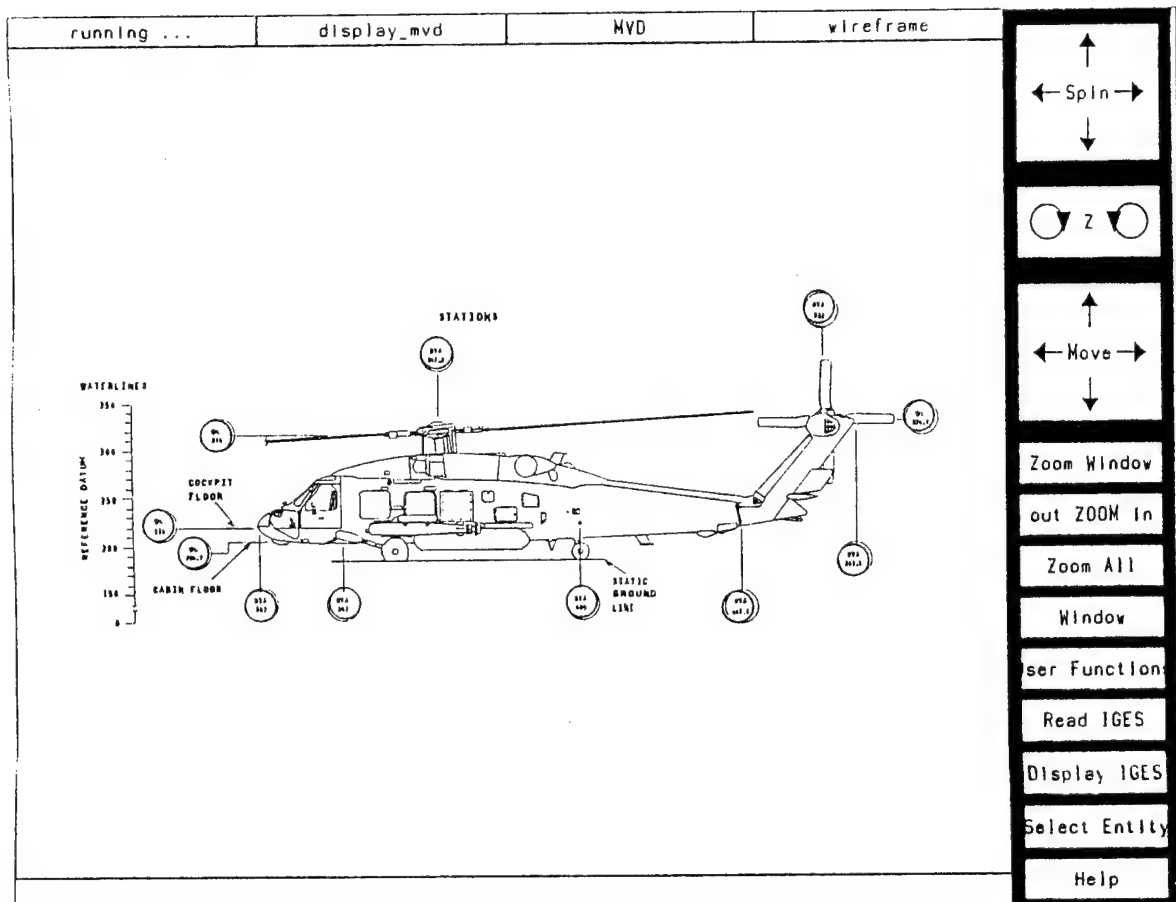
10.1.3 Output Cadkey v4.06



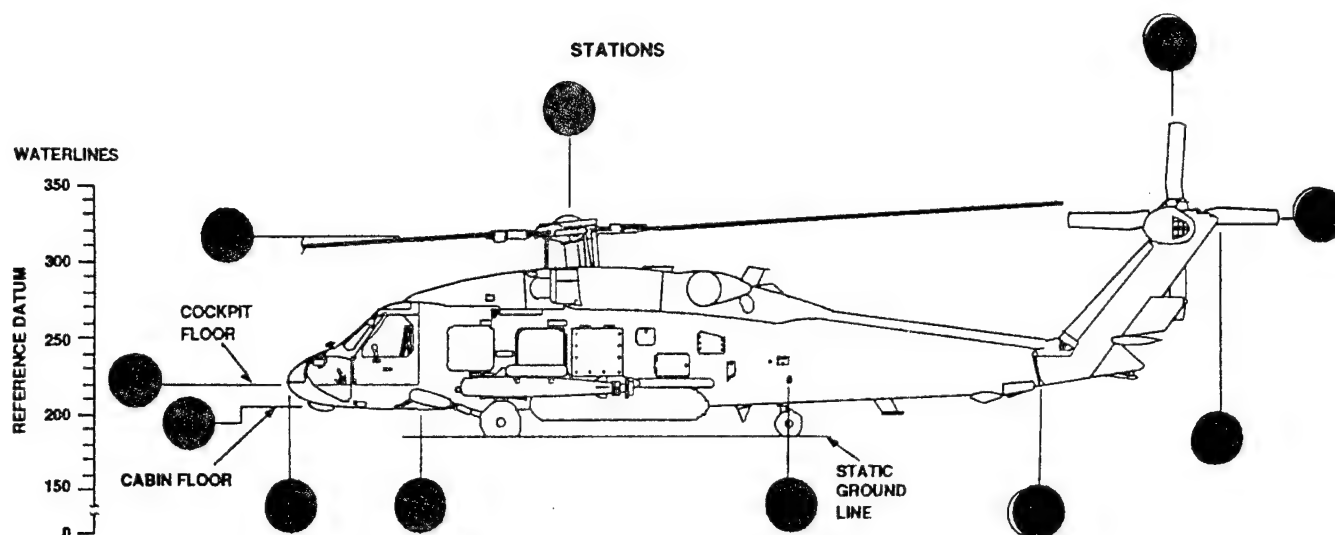
10.1.4 Output IGESView



10.1.5 Output IGESWorks



10.1.6 Output IslandDraw



10.1.7 Preview Error Log

ERROR REPORT FOR FILE /mnt/Set100/D001/D001Q007_IGS

>> File record length is 80

Terminate section report :

File Section	#lines
START	1
GLOBAL	3
DIRECTORY ENTRY	1174
PARAMETER DATA	2572
TERMINATE	1
TOTAL	3751

(Expect 80 X 3751 = 300080 bytes)

----- preliminary format scan complete -----

>> WARNING: Cannot use maximum power of 10 requested.
: Requested maximum power of 308 using 307.
: Field 9 line 2 of GLOBAL section. (Max. Exp. for Single)
27HarborText Inc. - IslandDraw,21Hdraw2iges Version 3.0,16,308,15,308, G 2
^^^

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 496 for graphic output.

<<<< PART OF LOG REMOVED HERE >>>>

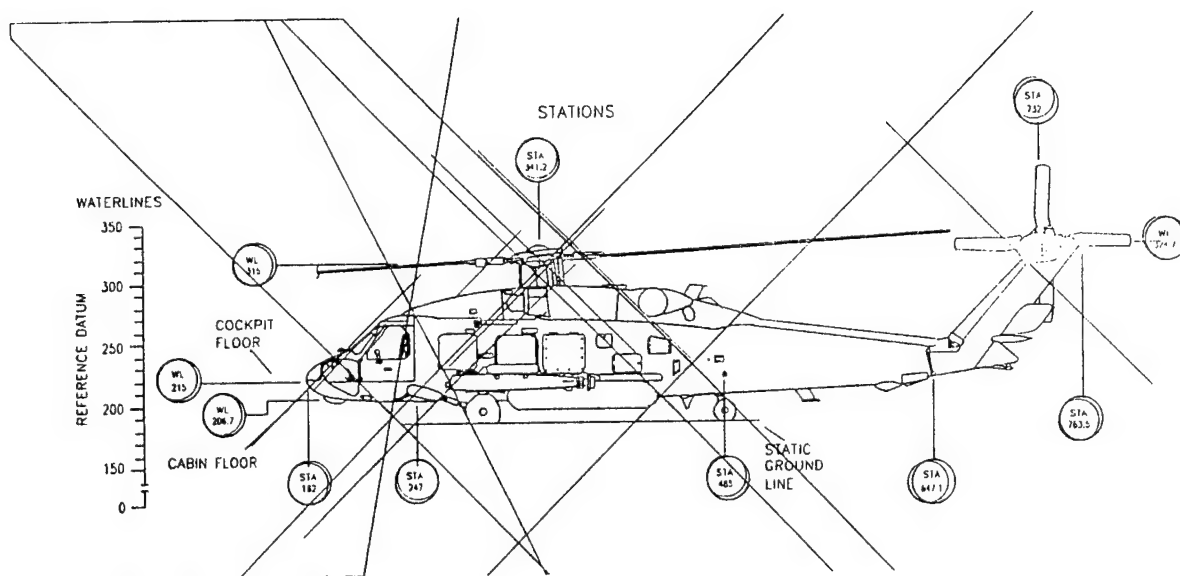
>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 502 for graphic output.

<<<< PART OF LOG REMOVED HERE >>>>

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 536 for graphic output.

Found 0 errors and 30 warnings

10.1.8 Preview Output



10.2 File D001Q009

10.2.1 Paser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
***      MARCH 1992      ***
***   IGES Data Analysis   ***
***      (708) 449-3430      ***
```

Input file is D001Q009_IGS

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is October 14, 1992 2:06 PM

*** File and Product Name Information ***

```
File name from sender   = './C1840_TAPE_IMAGE/d001q009.data'
File creation Date.Time = '920924.182605'
Model change Date.Time  = ''
Author                  = ''
Department              = ''
Product name from sender = 'ati_1840_demo/calsatwork'
Destination product name = ''
```

*** Parameter Delimiters ***

```
Delimiter = ','
Terminator = ';'

```

*** Originating System Data ***

```
System ID           = 'ArborText Inc. - IslandDraw'
Preprocessor version = 'draw2iges Version 3.0'
Specification version = 6 (IGES 4.0)
```

*** Precision levels ***

```
Integer bits = 16
Floating point - Exponent = 308  Mantissa = 15
Double precision - Exponent = 308  Mantissa = 15
```

*** Global Model Data ***

```
Model scale          = 1.0000E+00
Unit flag            = 2
```

Units = 'MM'
 Line weights = 1000
 Maximum line thickness = 1.000000E+01
 Minimum line thickness = 1.000000E-02
 Granularity = 1.000000E-02
 Maximum coordinate = 8.002800E+01

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	43
	Blanked	9
Independence:	Independent	15
	Physically Subordinate	27
	Logically Subordinate	10
	Totally Subordinate	0
Entity use:	Geometry	0
	Annotation	52
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	52
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
102	0	0	9	Composite curve
106	11	0	9	Copious data - Piecewise planar, linear string(2D path)
110	0	0	9	Line
212	0	0	5	General note
230	0	0	9	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	8300	0	1	IDA Property - Ignore entity

406	8301	0	2	IDA Property - Text style
406	8303	0	1	IDA Property - Pattern code
+ 406	8305	0	4	Implementor entity instance
410	0	0	1	View - Orthographic parallel

+ Indicates use of a Implementor defined form or entity.

*** Entity Count by Level ***

Level	Count
0	52

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled	52
-----------	----

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114
-----	-----	-----	-----	-----	-----	-----	-----

-	-	-	-	-	-	-	-	Undefined
-	9	-	9	-	9	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116	118	120	122	124	125	126	128
-----	-----	-----	-----	-----	-----	-----	-----

-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

130	132	134	136	138	140	142	144
-----	-----	-----	-----	-----	-----	-----	-----

-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom

-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	0	(0.0100)
1	38	(0.0100)
10	12	(0.1000)
70	2	(0.7000)

*** Colors Used in Data ***

Defaulted	29
Black	17
White	6

 ***** ENTITY ANALYSIS *****

*** Entity type: 102

SEVERE	2116: Invalid entity type (D	21) for composite curve at D	27.
SEVERE	2116: Invalid entity type (D	31) for composite curve at D	35.
SEVERE	2116: Invalid entity type (D	49) for composite curve at D	53.
SEVERE	2116: Invalid entity type (D	57) for composite curve at D	61.
SEVERE	2116: Invalid entity type (D	65) for composite curve at D	69.
SEVERE	2116: Invalid entity type (D	73) for composite curve at D	77.
SEVERE	2116: Invalid entity type (D	81) for composite curve at D	85.
SEVERE	2116: Invalid entity type (D	89) for composite curve at D	93.
SEVERE	2116: Invalid entity type (D	97) for composite curve at D	101.

*** Entity type: 106

*** Entity type: 110

CAUTION	2336: Zero length line at D	25.
CAUTION	2336: Zero length line at D	33.
CAUTION	2336: Zero length line at D	51.
CAUTION	2336: Zero length line at D	59.
CAUTION	2336: Zero length line at D	67.

CAUTION 2336: Zero length line at D 75.
CAUTION 2336: Zero length line at D 83.
CAUTION 2336: Zero length line at D 91.
CAUTION 2336: Zero length line at D 99.
-- 9 lines averaging 0.000000E+00 units --

*** Entity type: 212

5 text strings in data file.
Average text aspect ratio in file is 0.9539368.
Minimum text aspect ratio in file is 0.8765428.
Maximum text aspect ratio in file is 1.0668717.

FONTS USED IN FILE

FONT	COUNT	NAME
1	5	Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D 5 contains 1 views.
Drawing at D 5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
XMIN = Not Set XMAX = Not Set
YMIN = Not Set YMAX = Not Set
ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

2002: 9 Invalid entity referenced, Wire Frame Geometry.
2015: 9 Mathematically incorrect definitions.

*** Error Summary ***

0 fatal errors

9 severe errors
0 errors
0 warnings
9 cautions
0 nitpicks
0 notes

*** End of Analysis of D001Q009_IGS ***

10.2.2 Cadkey v4.06 Error Log

\arbor\q009.igs -> \arbor\q009.prt
IGES version - 4.0
Date of creation: 09/24/92

Start section:

Entity types do not match at PARAMETER index 27
Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 35
Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 53
Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 61
Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 69
Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 77
Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 85
Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 93
Found entity type 102 , expected type 106

Entity types do not match at PARAMETER index 101
Found entity type 102 , expected type 106

Entities Translated:

5 (212) General Note type
9 (230) Sectioned Area type
1 (404) Drawing type
1 (410) View type

Entities Not Translated:

9 (406) Property type

Special Notes

9 zero length lines encountered

9 Sectioned area(s) form 0 or 19 encountered.

(Only boundaries and islands processed)

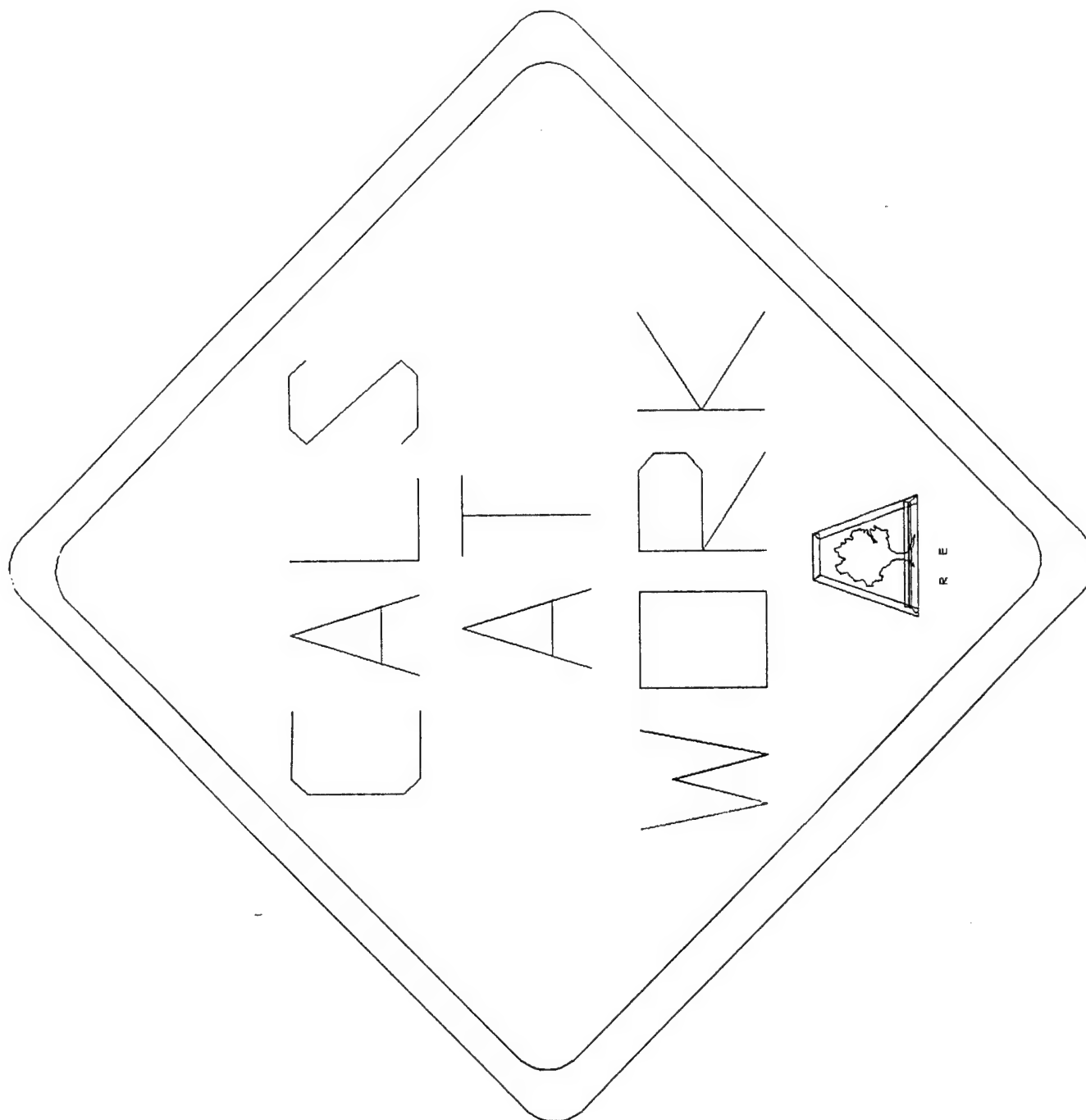
View Entities

View at D:1 placed in Level #241

Drawing Entities

Drawing at D:5 placed in Level #241 and contains 1
views

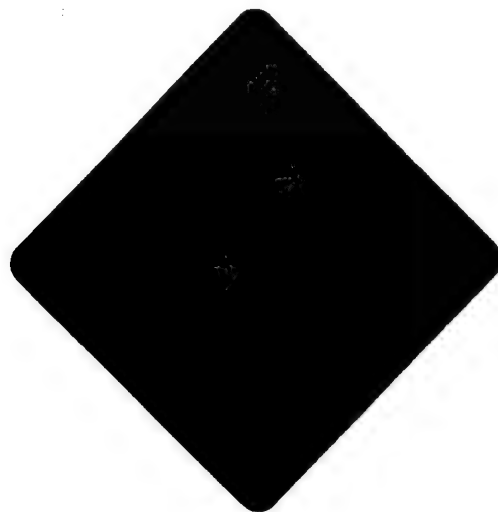
10.2.3 Cadkey Output



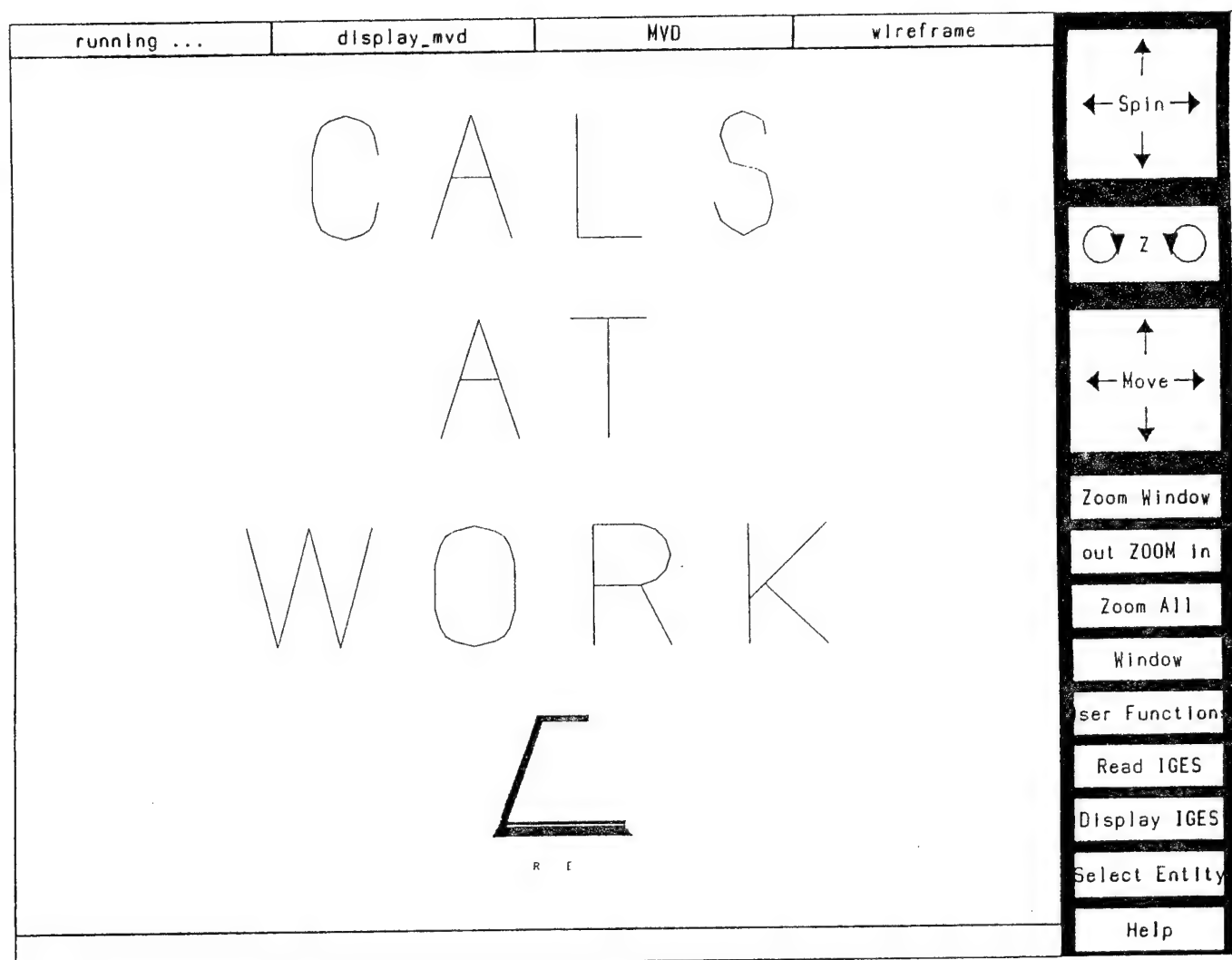
10.2.4 Output iges2ps



10.2.5 Output IGESView



10.2.6 Output IGESWorks



10.2.7 Output IslandDraw



10.2.8 Preview Error Log

ERROR REPORT FOR FILE /mnt/Set100/D001/D001Q009_IGS

>> File record length is 80

Terminate section report :

File Section	#lines
START	1
GLOBAL	4
DIRECTORY ENTRY	104
PARAMETER DATA	322
TERMINATE	1
TOTAL	432

(Expect 80 X 432 = 34560 bytes)

----- preliminary format scan complete -----

>> WARNING: Cannot use maximum power of 10 requested.
: Requested maximum power of 308 using 307.
: Field 9 line 3 of GLOBAL section. (Max. Exp. for Single)
21Hdraw2iges Version 3.0,16,308,15,308,15,,1.,2,2HMM,1000,10., G 3
^^^

>> WARNING: Cannot use maximum power of 10 requested.
: Requested maximum power of 308 using 307.
: Field 11 line 3 of GLOBAL section. (Max. Exp. for Double)
21Hdraw2iges Version 3.0,16,308,15,308,15,,1.,2,2HMM,1000,10., G 3
^^^

>> WARNING: Sectioned Area type 19 not supported
: Reading entity #15, DE entry #29 type SECTIONED AREA.
: Field 2, line 36 of PARAMETER DATA section.
230,27,19,0.,0.,0.,1.,0.7071,0,0,2,17,15; 29P 36106

>> WARNING: Sectioned Area type 19 not supported
: Reading entity #19, DE entry #37 type SECTIONED AREA.
: Field 2, line 53 of PARAMETER DATA section.
230,35,19,0.,0.,0.,1.,0.7071,0,0,2,17,15; 37P 53406

>> WARNING: Sectioned Area type 19 not supported
: Reading entity #28, DE entry #55 type SECTIONED AREA.

```
      : Field 2, line 66 of PARAMETER DATA section.
230,53,19,0.,0.,0.,1.,0.7071,0,0,1,47;                                55P      66106
-----
>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #32, DE entry #63 type SECTIONED AREA.
      : Field 2, line 71 of PARAMETER DATA section.
230,61,19,0.,0.,0.,1.,0.7071,0,0,1,47;                                63P      71106
-----
>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #36, DE entry #71 type SECTIONED AREA.
      : Field 2, line 76 of PARAMETER DATA section.
230,69,19,0.,0.,0.,1.,0.7071,0,0,1,19;                                71P      76106
-----
>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #40, DE entry #79 type SECTIONED AREA.
      : Field 2, line 307 of PARAMETER DATA section.
230,77,19,0.,0.,0.,1.,0.7071,0,0,1,19;                                79P      307106
-----
>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #44, DE entry #87 type SECTIONED AREA.
      : Field 2, line 312 of PARAMETER DATA section.
230,85,19,0.,0.,0.,1.,0.7071,0,0,1,19;                                87P      312106
-----
>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #48, DE entry #95 type SECTIONED AREA.
      : Field 2, line 317 of PARAMETER DATA section.
230,93,19,0.,0.,0.,1.,0.7071,0,0,1,19;                                95P      317106
-----
>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #52, DE entry #103 type SECTIONED AREA.
      : Field 2, line 322 of PARAMETER DATA section.
230,101,19,0.,0.,0.,1.,0.7071,0,0,1,19;                            103P     322S
^^
-----
>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 15 for graphic output.
-----
>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 19 for graphic output.
-----
>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 28 for graphic output.
-----
>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 32 for graphic output.
-----
>> WARNING: Unsupported sectioned area type 19 modified to 16
```

: in entity 36 for graphic output.

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 40 for graphic output.

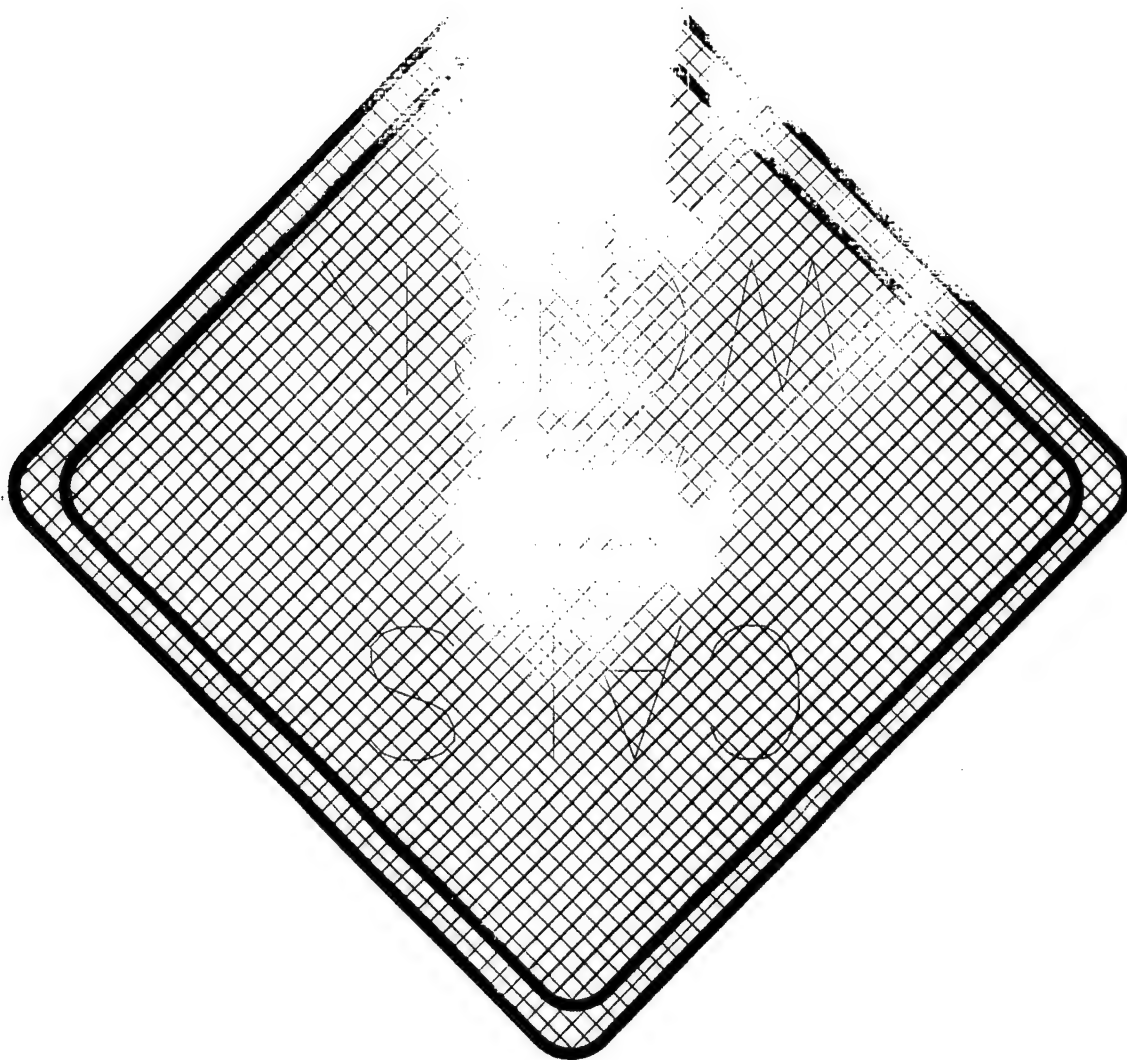
>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 44 for graphic output.

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 48 for graphic output.

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 52 for graphic output.

Found 0 errors and 20 warnings

10.2.9 Preview Output



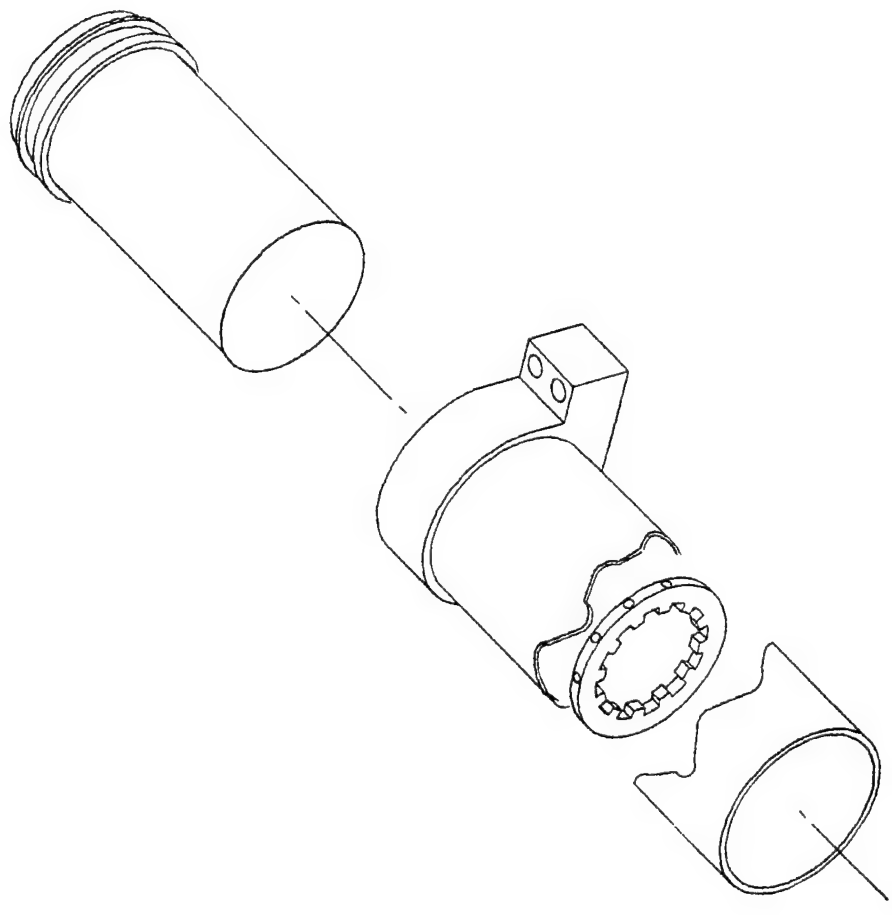
11. Appendix C - Detailed Raster Analysis

11.1 File D001R005 - D001R011

11.1.1 Output IslandPaint



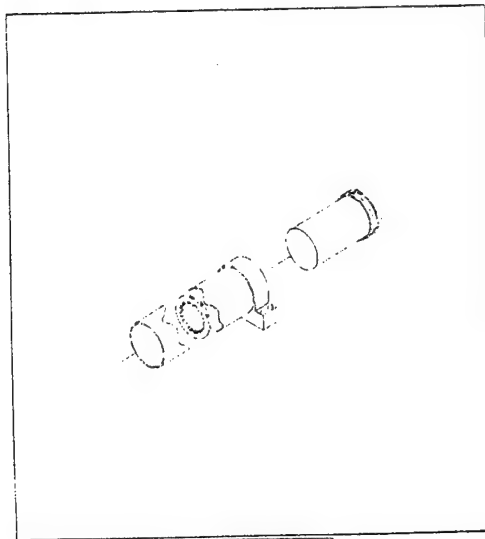
11.1.2 Output Preview - D001R005



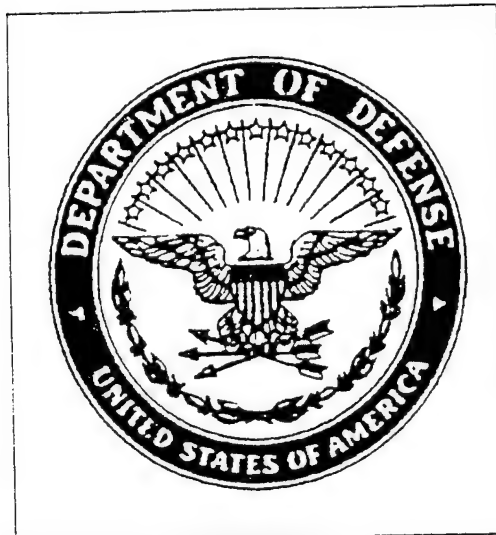
11.1.3 Output Preview - D001R011



11.1.4 Output Ventura Publisher



D001R005



D001R011

12. Appendix D - Detailed CGM Analysis

12.1 File D001C006

12.1.1 Parser Log MetaCHECK

MetaCHECK Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 10/14/92 Time: 13:55:47

Metafile Examined : \arbor\c006.cgm

Pictures Examined : All
Elements Examined : All
Bytes Examined : All

===== Trace Report =====

Tracing not selected.

===== CGM Conformance Violation Report =====

No Errors Detected

===== CALS CGM Profile (MIL-D-28003) Report =====

No profile discrepancies detected.

===== Conformance Summary Report =====

MetaCHECK Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 10/14/92 Time: 13:55:51

Name of CGM under test: \arbor\c006.cgm
Encoding : Binary

Pictures Examined : All
Elements Examined : All
Bytes Examined : All

BEGIN METAFILE string : "ati_1840_demo/test1cgm"
METAFILE DESCRIPTION : "Arbor Text draw2cgm version 1.06 ***
MIL-D-28003/BASIC-1"

Picture 1 starts at octet offset 172; string contains: ""

Conformance Summary : This file conforms to the CGM specification.

This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:

1 Pictures Tested
180 Elements Tested
19640 Octets Tested

```
=====
|   No Errors Were Detected   |
=====
```

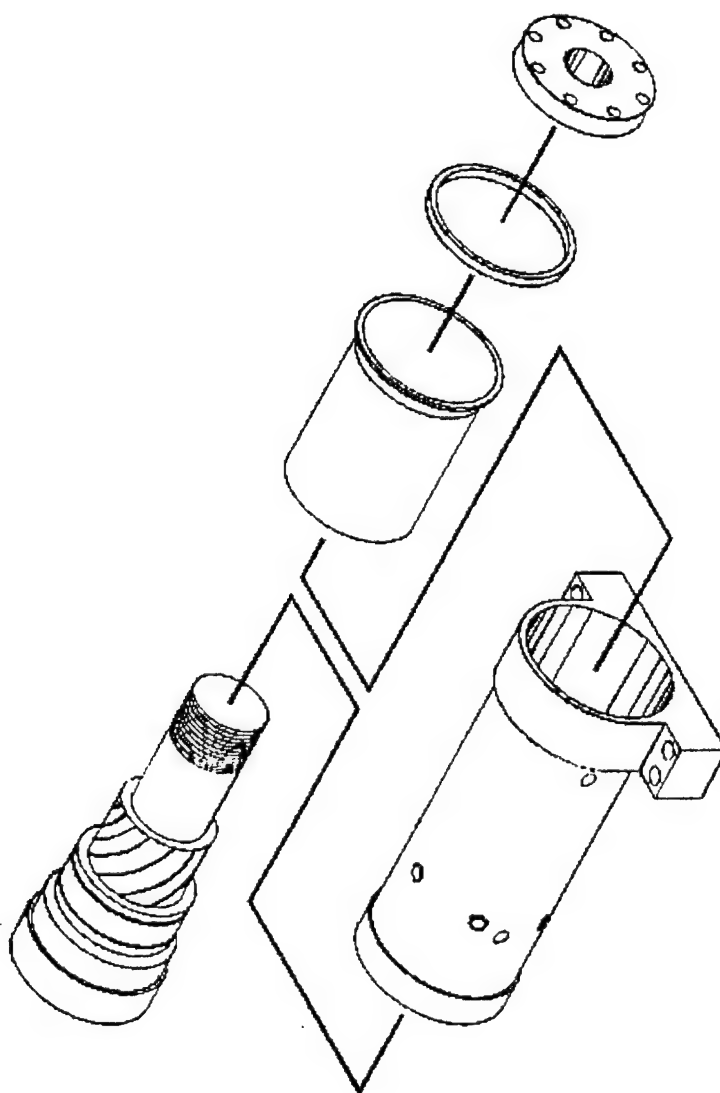
===== End of Conformance Report =====

12.1.2 validcgm Log

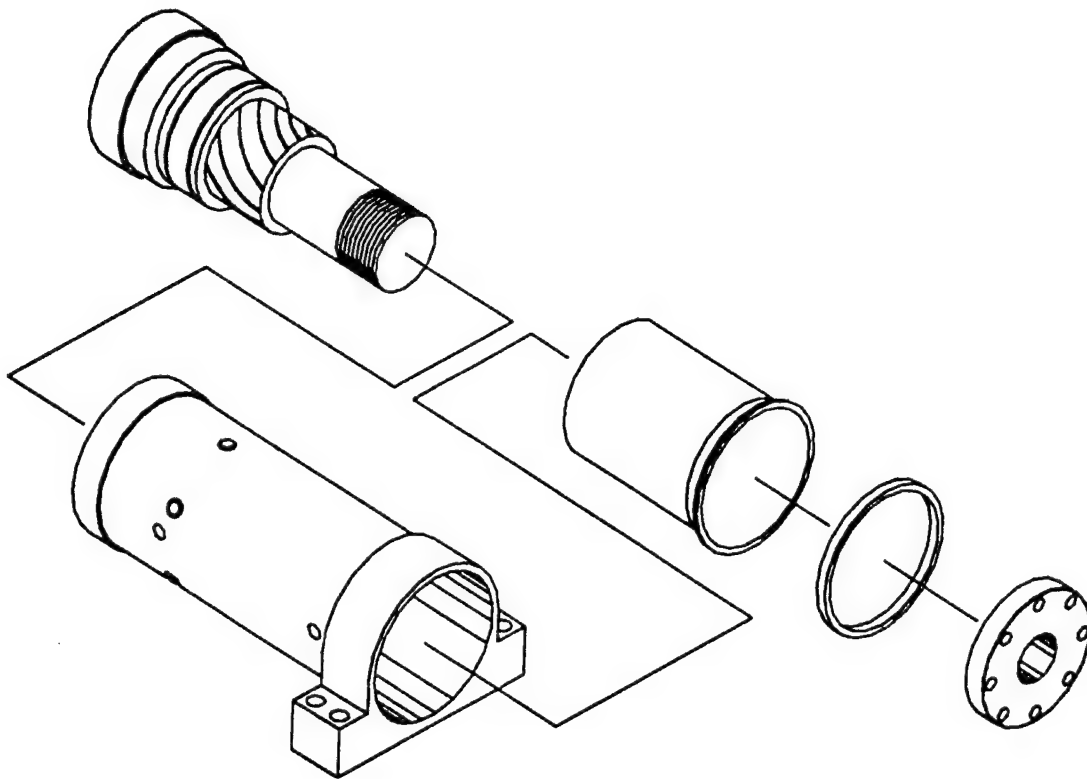
Analysis for file c006.cgm using table table
ERROR: invalid times used per CGM (2), std B
ERROR: invalid times used per Picture (2), std B
(14, 150) (1, 12, 10) Metafile Defaults Replacement
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 3) not yet seen
(14.1, 0) (2, 6, 8) VDC Extent (0, 0) (32767, 32767)
ERROR: invalid times used per CGM (3), std B
ERROR: invalid times used per Picture (3), std B
(15, 162) (1, 12, 4) Metafile Defaults Replacement
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 4) not yet seen
(15.1, 0) (5, 11, 2) Text Precision Stroke
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 3) occurred 1 time
(1, 4) occurred 1 time
(1, 5) occurred 1 time
(1, 6) occurred 1 time

(1, 7) occurred 1 time
(1, 8) occurred 1 time
(1, 9) occurred 1 time
(1, 10) occurred 1 time
(1, 11) occurred 1 time
(1, 12) occurred 3 times
(1, 12) occurred illegally 2 times
(1, 15) occurred 1 time
(2, 1) occurred 1 time
(2, 2) occurred 1 time
(2, 3) occurred 1 time
(2, 4) occurred 1 time
(2, 5) occurred 1 time
(2, 6) occurred 2 times
(2, 6) occurred illegally 1 time
(2, 7) occurred 1 time
(3, 1) occurred 1 time
(4, 1) occurred 146 times
(4, 7) occurred 4 times
(5, 11) occurred 1 time
(5, 11) occurred illegally 1 time
(5, 22) occurred 1 time
(5, 23) occurred 1 time
(5, 34) occurred 1 time

12.1.3 Output Harvard Graphics



12.1.4 Output IslandDraw



12.2 File D001C010

12.2.1 Parser Log MetaCHECK

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 10/14/92 Time: 13:56:00

Metafile Examined : \arbor\c010.cgm

Pictures Examined : All
Elements Examined : All
Bytes Examined : All

===== Trace Report =====

Tracing not selected.

===== CGM Conformance Violation Report =====

Bulletin 20009: Element Class/ID: 4/1 Offset: 6420 octets Element No. 48
Warning; POLYLINE with only one distinct vertex.

Bulletin 20009: Element Class/ID: 4/1 Offset: 13418 octets Element No. 81
Warning; POLYLINE with only one distinct vertex.

Bulletin 20009: Element Class/ID: 4/1 Offset: 16906 octets Element No. 104
Warning; POLYLINE with only one distinct vertex.

===== CALS CGM Profile (MIL-D-28003) Report =====

No profile discrepancies detected.

===== Conformance Summary Report =====

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 10/14/92 Time: 13:56:05

Name of CGM under test: \arbor\c010.cgm
Encoding : Binary

Pictures Examined : All
Elements Examined : All
Bytes Examined : All

BEGIN METAFILE string : "ati_1840_demo/test2cgm"
METAFILE DESCRIPTION : "Arbor Text draw2cgm version 1.06 ***
MIL-D-28003/BASIC-1"

Picture 1 starts at octet offset 172; string contains: ""

Conformance Summary : This file conforms to the CGM specification.

This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:

1 Pictures Tested
140 Elements Tested
26372 Octets Tested

0 Illegal CGM Elements	1000 -	1999
0 Incorrect CGM Element Lengths	2000 -	2999
0 CGM State Errors	3000 -	3499
0 Required CGM Elements Missing or Wrong	4000 -	4499
0 CGM Parameter Values Out of Range	6000 -	6499
0 CGM Structure Errors	7000 -	7499
0 *** CGM Errors Found (total)	***	

0 Profile State Errors	3500 -	3999
0 Illegal Profile Elements	4500 -	4999
0 Profile Parameter Values Out of Range	6500 -	6999
0 Profile Data Limits Exceeded	8500 -	8999
0 Other Profile Constraints Violated	9500 -	9999
0 *** Profile Violations Found (total)	***	

3 Warnings (Advisory Remarks)	20000 -	20999
-------------------------------	---------	-------

1 distinct errors and warnings were reported.

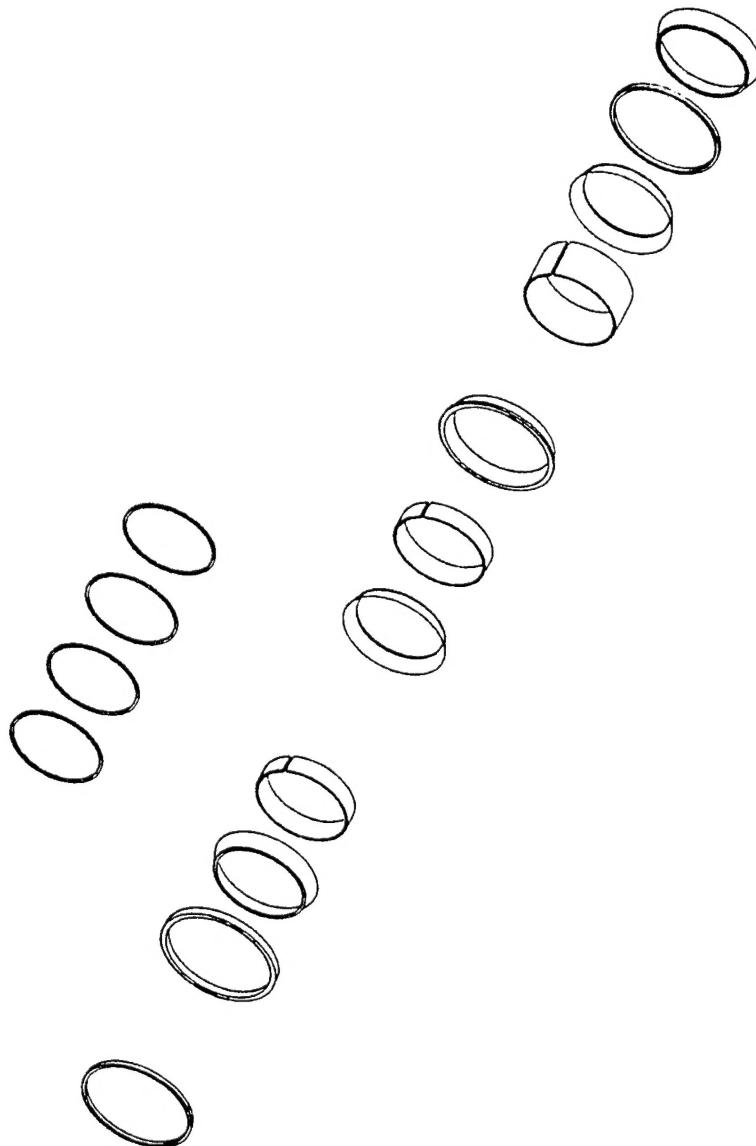
===== End of Conformance Report =====

12.2.2 validecgm Log

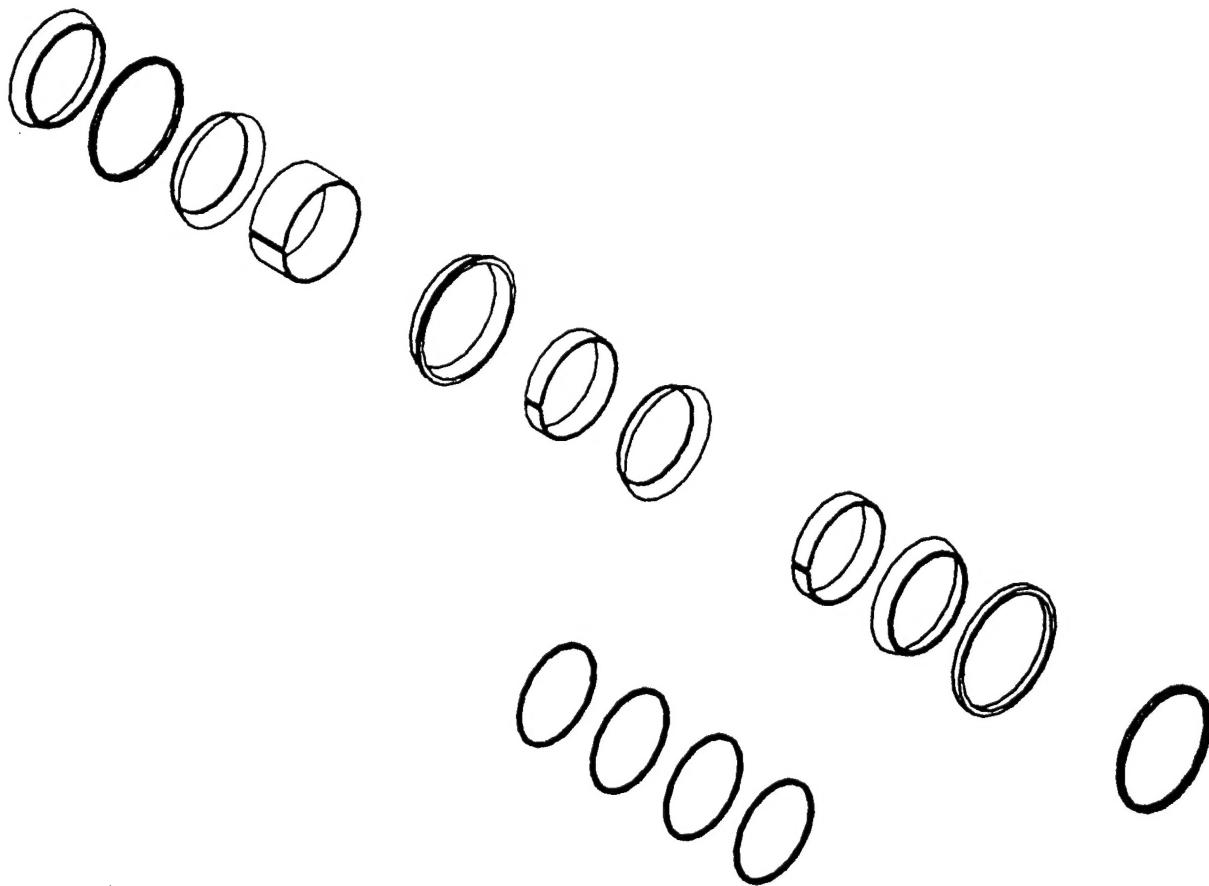
Analysis for file c010.cgm using table table
ERROR: invalid times used per CGM (2), std B
ERROR: invalid times used per Picture (2), std B
(14, 150) (1, 12, 10) Metafile Defaults Replacement
ERROR: illegal in this state (2), std B

ERROR: required precursor (0, 3) not yet seen
(14.1, 0) (2, 6, 8) VDC Extent (0, 0) (32767, 32767)
ERROR: invalid times used per CGM (3), std B
ERROR: invalid times used per Picture (3), std B
(15, 162) (1, 12, 4) Metafile Defaults Replacement
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 4) not yet seen
(15.1, 0) (5, 11, 2) Text Precision Stroke
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 3) occurred 1 time
(1, 4) occurred 1 time
(1, 5) occurred 1 time
(1, 6) occurred 1 time
(1, 7) occurred 1 time
(1, 8) occurred 1 time
(1, 9) occurred 1 time
(1, 10) occurred 1 time
(1, 11) occurred 1 time
(1, 12) occurred 3 times
(1, 12) occurred illegally 2 times
(1, 15) occurred 1 time
(2, 1) occurred 1 time
(2, 2) occurred 1 time
(2, 3) occurred 1 time
(2, 4) occurred 1 time
(2, 5) occurred 1 time
(2, 6) occurred 2 times
(2, 6) occurred illegally 1 time
(2, 7) occurred 1 time
(3, 1) occurred 1 time
(4, 1) occurred 112 times
(5, 11) occurred 1 time
(5, 11) occurred illegally 1 time
(5, 34) occurred 1 time

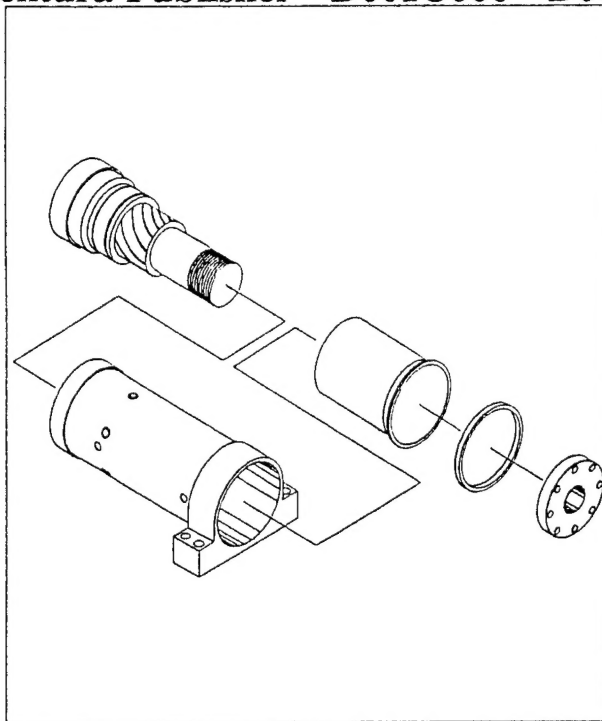
12.2.3 Output Harvard Graphics



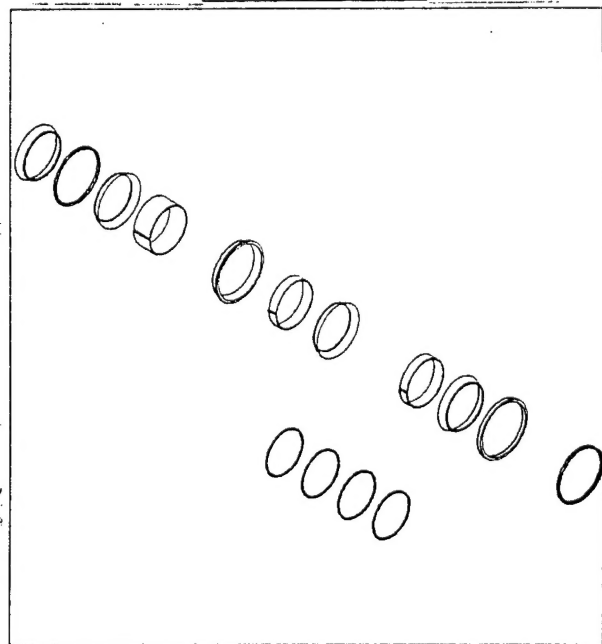
12.2.4 Output IslandDraw



12.3 Output Ventura Publisher - D001C006 - D001C010



D001C006



D001C010